

Naman Dhariwal

Data Scientist & Machine Learning Engineer

Ann Arbor, MI, USA | (734) 277-9651 | namandhariwal@gmail.com | linkedin.com/in/naman-dhariwal

EDUCATION

University of Michigan, College of LSA, Dept. of Statistics
Master of Science in Data Science | CGPA: 3.79/4.0

Ann Arbor, USA
Expected Dec 2025

VIT University, School of Computer Science and Engineering
B. Tech in Computer Science and Engineering | CGPA: 9.1/10
• *Student Startup Venture Funds Awardee – INR 160,000*
• *Raman Research Award*

Vellore, India
May 2024
2024
2023, 2023, 2024

TECHNICAL SKILLS

Data Science & AI: Deep Learning, Machine Learning, Natural Language Processing, Computer Vision, TinyML, Big Data Analytics, Statistical Analysis, Mathematical Modelling

Research Expertise: Oncology, Healthcare, ML and Analytics, Regression Models, Latex, Qualtrics

Statistical Software: Python, R, MATLAB, Excel

Database/Servers: MySQL, Oracle LiveSQL, Cloud Computing, AWS

Management: Operations Management, Lean Start-up Management, Leading Start-up Teams

Mechanical Engineering: Engineering Drawing, Manufacturing Processes

WORK EXPERIENCE

Data Specialist / Research Assistant – Kelsey Museum, College of LSA, University of Michigan

2025 – Present

- Developed a proprietary database by web-scraping 50K+ research articles, within 3 weeks.
- Cleaned and normalized bibliographic metadata for website integration, reduced manual curation by 80%.
- Collaborated with 6 stakeholders; improved team workflow efficiency by automation.

Artificial Intelligence Application Fellow – Center of Academic Innovation, University of Michigan

2024 – Present

- Constructed a proprietary database & augmented it with ChatGPT, growing data volume by 28%.
- Fine-tuned LLM with the proprietary dataset to classify course videos, saving 40% of the dataset annotation cost.
- Integrated cutting-edge vision foundation models into the existing LLM, improving recommendation quality by 20%.

Secretary/Research Associate - College of Pharmacy, University of Michigan

2024 – 2025

- Optimized academic resources by integrating the latest approved pharmaceutical policies for 90+ students.
- Researched, analysed and maintained records of 52 pharmacological clinical trials for clinical studies.
- Managed and proof-read real-world survey forms to ensure compliance before distribution to patients.

PUBLISHED ORIGINAL RESEARCH

"A Pilot Study on AI-driven Approaches for Classification of Mental Health Disorders" - *Frontiers in Human Neuroscience - Brain-Computer Interfaces* | 2024

- First Author; Identified and quantised correlation between neuro-disorders and addictions with 99.79% accuracy & <1% error.

"An Artificial Intelligence Based Approach Toward Predicting Mortality in Head and Neck Cancer Patients with Relation to Smoking and Clinical Data " - *IEEE Access* | 2023

- First Author; Engineered advanced XGBoost model predicting mortality with 98.8% accuracy & high recall in HNC patients.

"Audio and Text Sentiment Analysis of Radio Broadcasts" - *IEEE Access* | 2023

- First Author; Researched on combined results from audio and text sentiment analysis of 46 days of radio broadcasts to identify distress or oppression.

"Brain Metastasis Origin and Patient Mortality Predictions Using MRI with Clinical and Imaging Feature Information by Deep Learning Architectures " - *IEEE - INOCON* | 2024

- Sole Author; Researched and identified the origin of metastasis with 97.12% accuracy; Predicted mortality with 99.5% accuracy by engineering a tuned Recurrent Neural Network.

"Towards Precision Oncology: Predicting Mortality and Relapse-Free Survival in Head and Neck Cancer Using Clinical Data" - *Quantitative Biology, Arxiv* | 2025

- First Author; Developed ML model to predict mortality and relapse-free survival in HNSCC patients, with 99% recall values.

"Using Machine Learning Regression Model to Predict the Optimum Election Algorithm for Parallel and Distributed Computing Systems" - *IEEE - STCR* | 2023

- Sole Author; Engineered a regression model to predicted the optimum election algorithm with 94.98% accuracy.

"Voice Stimulated Inclusive Multiplayer Game Development with Speaker Recognition" - *IEEE - STCR* | 2023

- Co-Author; Engineered an inclusive gaming experience using simultaneous voice recognition technology for the impaired.

START-UP AND PROJECTS

Chief Executive - A-Eye (*Startup under Incubation*) 2023 - Present

- Engineering an AI based assistive wearable product to assist the visually impaired.
- Designed & assembled the 1st prototype by integrating computer vision algorithms, micro-computer, camera and peripherals.
- Secured INR 160,000 funding to patent (pending) the product.

Chief Engineer - Elderly Fall Detection Wearable (*Startup under Incubation*) 2022 - 2024

- Programmed and deployed CNN on a microcontroller module for fall detection in the elderly with 96% accuracy
- Engineered the first functioning prototype and designed the custom PCB (under manufacturing) - Secured SEED funding.

Machine Learning Engineer - CPR Quality Assurance and Real-Time Feedback System 2023 - 2024

- Secured SEED funding of INR 200,000 for research and development
- Programmed the XGBoost architecture that interprets the electromyographic signals to predict quality with 99.8% accuracy.
- Simulated real-world CPR on manikin to evaluate system performance.